

REMARKS

In the office action dated April 21, 2008, claims 20-26 and 29-32 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,925,012 (Murphy-Chutorian). Claims 27 and 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Murphy-Chutorian in view of U.S. Patent No. 4,457,712 (Dragan). Finally, claim 30 has been objected to because there is no antecedent basis for “the control mechanism”.

Applicants respectfully traverse the foregoing rejections, and request reconsideration.

In response to the objection to claim 30, claim 30 has been amended to render it dependent from claim 21, rather than claim 20. Claim 21 explicitly recites “a control mechanism”. Therefore, there is now an antecedent basis for “the control mechanism” in claim 30.

Claim 20 was amended only to correct minor errors. No new matter was added.

Applicants respectfully traverse the rejection of claims 20-26 and 29-32 as being anticipated by Murphy-Chutorian. Murphy-Chutorian does not anticipate each and every one of claims 20-26 and 29-32, because Murphy-Chutorian does not describe each and every element in each and every one of these claims, either expressly or inherently. (See MPEP § 2131).

In particular, with respect to claim 20, Murphy-Chutorian does not describe “an elongate flexible catheter body having a proximal end and a distal end and a length and flexibility sufficient to allow for transluminal delivery through a patient’s vasculature to a target region of the myocardium”. The examiner, on page 2 of the office action, states that manifold means 106 of Murphy-Chutorian is such a flexible catheter. However, Murphy-Chutorian teaches otherwise. In col. 18, at lines 11-17, Murphy-Chutorian states that drawing figure 3 and the other figures in the application, only disclose a preferred embodiment which is for use in surgical and minimally invasive surgical procedures. There is no disclosure whatsoever in Murphy-Chutorian of using a flexible catheter that is sufficiently flexible to allow for transluminal delivery. The apparatus used in Murphy-Chutorian’s procedures does not include an elongate flexible catheter body which is of a

length and flexibility sufficient to allow for transluminal delivery through a patient's vasculature. In fact, the specific apparatuses disclosed in the drawing figures and described in Murphy-Chutorian all have and require the use of a more rigid material. The examiner's attention is directed to col. 16, lines 13-16 of Murphy-Chutorian, in which it is disclosed that the material used for the manifold means 106 is tantalum, stainless steel, glass, etc. Each of these materials is inherently too rigid to be snaked down a patient's vasculature without the risk of severely injuring the patient. Therefore, the foregoing limitation of a flexible catheter body is neither expressly described nor inherent in Murphy-Chutorian.

Should the examiner construe Murphy-Chutorian as disclosing or suggesting a flexible catheter which could be introduced through the vasculature, the Murphy-Chutorian specification is not enabling for such an embodiment. There is no disclosure whatsoever of an apparatus which has a tube or catheter sufficiently flexible to allow for transluminal delivery through a patient's vasculature. Indeed, as noted, all of the apparatuses disclosed in Murphy-Chutorian relates to surgical or minimally invasive surgical procedures. It would not be at all clear how one would introduce not only the drug delivery apparatus, but also the optical fiber for transmitting laser energy to the surgical site through the vasculature. The drug delivery apparatus is quite complex, and requires a number of moving parts. In all of the embodiments in Murphy-Chutorian, the distal end 112 of the laser delivery means enters the laser inlet 116 separately from the drug conduit 108. It is not described in Murphy-Chutorian how one of skill would provide both of these components in a single catheter which is sufficiently flexible to allow for transluminal delivery through a patient's vasculature. Therefore, for this additional reason, because this limitation is not enabled by Murphy-Chutorian, it is respectfully submitted that claim 20 cannot be anticipated by Murphy-Chutorian. Elan Pharm., Inc. v. Mayo Found. for Med. Educ. And Res., 346 F.3d 1051, 1055 (Fed. Cir. 2003). (The disclosure in an assertedly anticipating reference must be adequate to enable possession of the desired subject matter without undue experimentation.)

Claims 21-32 are all dependent from claim 20 and are not anticipated by Murphy-Chutorian for at least the same reasons as claim 20.

Claim 22 is not anticipated by Murphy-Chutorian for the additional reason that Murphy-Chutorian fails to disclose any sort of steering mechanism for turning the distal end of a catheter body to guide the delivery chamber through a body lumen. The examiner points to no structure disclosed in Murphy-Chutorian which corresponds to the steering mechanism recited in claim 22. Because, as noted above, the manifold means 106 of Murphy-Chutorian, characterized by the examiner as being a catheter body, is not a flexible catheter but rather is a more rigid device that cannot be steered and because Murphy-Chutorian fails to disclose any sort of apparatus whatsoever for guiding or turning the distal end of any sort of catheter body to allow it to be guided through a body lumen, this limitation is not met by Murphy-Chutorian. Should the examiner disagree with applicant's argument that Murphy-Chutorian's manifold means 106 is not disclosed to be flexible, there is clearly no apparatus shown or even suggested by Murphy-Chutorian that would constitute a steering mechanism. Therefore, for these additional reasons, claim 22 is not anticipated.

Claim 23 is not anticipated for the additional reason that there is no disclosure whatsoever in Murphy-Chutorian that the flexible body is dimensionally adapted to allow for transluminal delivery. In fact, to the contrary, Murphy-Chutorian teaches that all of the apparatuses described in each of the drawing figures are suitable only for minimally invasive surgical procedures or surgical procedures (col. 18, lines 11-13).

Claim 32 recites that the delivery chamber includes a port formed from a plurality of converging flexible fingers. The examiner rejected claim 32 without discussing it at all, let alone pointing to a specific feature disclosed in Murphy-Chutorian which would correspond to a plurality of converging flexible fingers. According to claim 20, the delivery chamber is coupled to the distal end of the catheter body. If one considers the distal end of the catheter body in Murphy-Chutorian to be a distal end of tube 117 adjacent needle tip 118, there is no disclosure whatsoever of any port at all, let alone a port formed from a plurality of converging flexible fingers. Therefore, it is respectfully submitted that claim 32 is not anticipated by Murphy-Chutorian for this additional reason.

Applicants respectfully traverse the rejection of claims 27 and 28 under 35 U.S.C. § 103(a) as being unpatentable over Murphy-Chutorian in view of Dragan. Claims 27 and 28 are both dependent from claim 20, and therefore contain all of the limitations of claim 20. As noted above, Murphy-Chutorian does not disclose or even suggest an elongate flexible catheter body which is of a length and flexibility sufficient to allow for transluminal delivery through a patient's vasculature. Dragan also fails to disclose or even suggest such a structure, since Dragan discloses a dental syringe having a barrel and a plunger intended to extrude root canal resin into a root canal. Of necessity, the Dragan barrel must be rigid in order to perform its intended function. Therefore, at least this limitation of an elongate flexible catheter body is not disclosed or suggested by Murphy-Chutorian or Dragan, alone or in combination. Moreover, applicants submit that one of ordinary skill in the art would not combine Murphy-Chutorian with Dragan. As noted, Dragan discloses a dental syringe. Murphy-Chutorian, on the other hand, discloses a laser assisted drug delivery apparatus. These devices are wholly unrelated in the art, and are intended for entirely different applications to treat entirely different indications. It is only through the benefit of hindsight provided by applicants that the examiner has combined these references. Therefore, it is submitted that for at least these reasons, claims 27 and 28 are not obvious over a combination of Murphy-Chutorian and Dragan.

For the foregoing reasons, it is respectfully submitted that all of the claims are in condition for allowance. Reconsideration and allowance of the claims are respectfully requested.

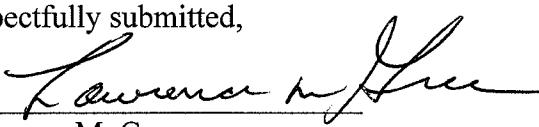
If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, the Director is hereby authorized to charge any deficiency or credit any overpayment in the fees filed, asserted to be filed or which should have been filed herewith to our Deposit Account No. 23/2825, under Docket No. B0953.70017US00.

The examiner is invited to telephone applicants' undersigned attorney should he feel that such a telephone call would further the prosecution of the present application.

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Respectfully submitted,

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